

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Mark S. Moir et al.  
Title: SPACE-AND-TIME-ADAPTIVE NONBLOCKING ALGORITHMS  
Application No.: 10/621,078 Filed: July 16, 2003  
Examiner: Unassigned Group Art Unit: 2184  
Atty. Docket No.: 004-8193

September 27, 2004

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- ☒ Form(s) PTO-1449 (2 pages), including copy(ies) of 33 reference(s).  
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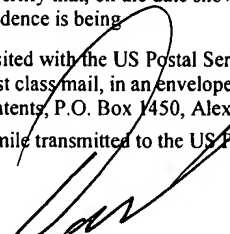
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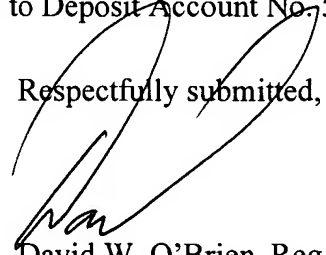
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- ☐ This Information Disclosure Statement is filed within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) or within three months of entry of the national stage as set forth in § 1.491 in an international application. Therefore, no fee is required.
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Respectfully submitted,

  
David W. O'Brien, Reg. No. 40,107  
Attorney for Applicant(s)  
(512) 338-6314  
(512) 338-6301 (fax)

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U.S. Department of Commerce, Patent and Trademark Office		Attorney Docket No.: 004-8193
		Application No.: 10/621,078
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		Applicant(s): Moir et al.
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<b>NON PATENT LITERATURE DOCUMENTS</b>		
*Examiner Initial	Cite No.	(Including name of author in capital letters, title of article, title of item, date, pertinent pages, volume-issue number(s), publisher, city and/or country where published.)
	1	Afek, Yehuda et al., "Long-Lived Renaming Made Adaptive", 18 <sup>th</sup> Annual ACM Symposium on Principles of Distributed Computing, pages 91-104, 1999.
	2	Afek, Yehuda, "Wait-Free Made Fast", 27 <sup>th</sup> Annual ACM Symposium on Theory of Computing, pages 538-547, 1995.
	3	Agesen, Ole et al., "DCAS-Based Concurrent Deques", 12 <sup>th</sup> Annual ACM Symposium on Parallel Algorithms and Architectures, pages 137-146, July 2000.
	4	Anderson, James H. et al., "Using Local-Spin k-Exclusion Algorithms to Improve Wait-Free Object Implementations", 12 <sup>th</sup> Annual ACM Symposium on Principles of Distributed Computing, November 1995 (revised 1996, 1997).
	5	Arora, Nimar S. et al., "Thread Scheduling for Multiprogrammed Multiprocessors", 10 <sup>th</sup> Annual ACM Symposium on Parallel Algorithms and Architectures, pages 119-129, 1998.
	6	Attiya, Hagit et al., "An Adaptive Collect Algorithm with Applications", Dept. of Computing Science, The Technion, Israel, May 10, 2001.
	7	Barnes, Greg, "A Method for Implementing Lock-Free Shared Data Structures", 5 <sup>th</sup> Annual ACM Symposium on Parallel Algorithms and Architectures, pages 261-270, 1993.
	8	Bayer, R. et al., "Concurrency of Operations on B-Trees", Acta Informatica, 1977.
	9	Detlefs, David L. et al., "Even Better DCAS-Based Concurrent Deques", 14 <sup>th</sup> International Conference on Distributed Computing, pages 59-73, 2000.
	10	Detlefs, David L. et al., "Lock-Free Reference Counting", 20 <sup>th</sup> Annual ACM Symposium on Principles of Distributed Computing, pages 190-199, 2001.
	11	Dice, David et al., "Mostly Lock-Free Malloc", ACM 2002.ACM SIGPLAN International Symposium on Memory Management, June 2002.
	12	Greenwald, Michael B., "Non-Blocking Synchronization and System Design", PhD Thesis, Stanford University Technical Report STAN-CS-TR-1624, Palo Alto, California, August 1999.
	13	Herlihy, Maurice, "A Methodology for Implementing Highly Concurrent Data Objects", ACM Transactions on Programming Languages and System, pages 745-770, November 1993.
	14	Herlihy, Maurice, "Dynamic-Sized Lockfree Data Structures", Sun Microsystems Technical Report SMLI TR-2002-112, June 2002.
	15	Herlihy, Maurice et al., "Linearizability: A Correctness Condition for Concurrent Objects", ACM Transactions on Programming Languages and Systems, pages 463-492, July 1990.
	16	Herlihy, Maurice et al., "The Repeat Offender Problem: A Mechanism for Supporting Dynamic-Sized Lock-Free Data Structures", Sun Microsystems Technical Report SMLI TR-2002-112, June 2002.
Examiner		Date Considered
<p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.</p>		

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*Examiner Initial	Cite No.	(Including name of author in capital letters, title of article, title of item, date, pertinent pages, volume-issue number(s), publisher, city and/or country where published.)
	17	Herlihy, Maurice et al., "Transactional Memory: Architectural Support for Lock-Free Data Structures", 20 <sup>th</sup> International Symposium in Computer Architecture, 1993.
	18	Herlihy, Maurice et al., "Obstruction-Free Synchronization: Double-Ended Queues as an Example", 23 <sup>rd</sup> International Conference on Distributed Computing, May 2003.
	19	Israeli, Amos et al., "Disjoint-Access-Parallel Implementations of Strong Shared Memory Primitives", 13 <sup>th</sup> Annual ACM Symposium on Principles of Distributed Computing, pages 151-160, 1994
	20	Lamport, Leslie, "How to Make a Multiprocessor Computer that Correctly Executes Multiprocess Programs", IEEE Transactions on Computers, September 1979.
	21	Luchangco, Victor et al., "Nonblocking k-compare-single-swap", 15 <sup>th</sup> Annual ACM Symposium on Parallel Algorithms and Architectures, June 2003.
	22	Martin, Paul et al., "DCAS-Based Concurrent Deques Supporting Bulk Allocation", Sun Microsystems, Inc. Technical Report SMI TR-2002-111, October 2002.
	23	Michael, Maged M. et al., "Non-Blocking Algorithms and Preemption-Safe Locking on Multiprogrammed Shared Memory Multiprocessors", Journal of Parallel and Distributed Computing, March 1997.
	24	Michael, Maged M. et al., "Simple, Fast and Practical Non-Blocking and Blocking Concurrent Queue Algorithms", 15 <sup>th</sup> Annual ACM Symposium on Principles of Distributed Computing, pages 267-276, 1996.
	25	Michael, Maged M., "Safe Memory Reclamation for Dynamic Lock-Free Objects Using Atomic Reads and Writes", 21 <sup>st</sup> Annual ACM Symposium on Principles of Distributed Computing, pages 21-30, January 2002.
	26	Moir, Mark, "Laziness Pays! Using Lazy Synchronization Mechanisms to Improve Non-Blocking Constructions", 19 <sup>th</sup> Annual ACM Symposium on Principles of Distributed Computing, 2000.
	27	Moir, Mark, "Practical Implementations of Non-Blocking Synchronization Primitives", 16 <sup>th</sup> Annual ACM Symposium on Principles of Distributed Computing, 1997.
	28	Moir, Mark, "Transparent Support for Wait-Free Transactions", 11 <sup>th</sup> International Workshop on Distributed Algorithms, 1997.
	29	Moir, Mark et al., "Wait-Free Algorithms for Fast, Long-Lived Renaming", Science of Computer Programming, August 1994.
	30	Saks, Michael et al., "Optimal Time Randomized Consensus - Making Resilient Algorithms Fast in Practice", 2 <sup>nd</sup> ACM SIAM Symposium on Discrete Algorithms, pages 351-362, 1991.
	31	Shavit, Nir et al., "Software Transactional Memory", Distributed Computing, Special Issue (10), 1997.
	32	Trieber, R., "Systems Programming: Coping with Parallelism", IBM Technical Report RJ5118, April 23, 1986.
	33	Turek, John et al., "Locking without Blocking: Making Lock Based Concurrent Data Structure Algorithms Nonblocking", 11 <sup>th</sup> ACM SIGACT-SIGMOD-SIGART Symposium on Principles of Database Systems, 1992.
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